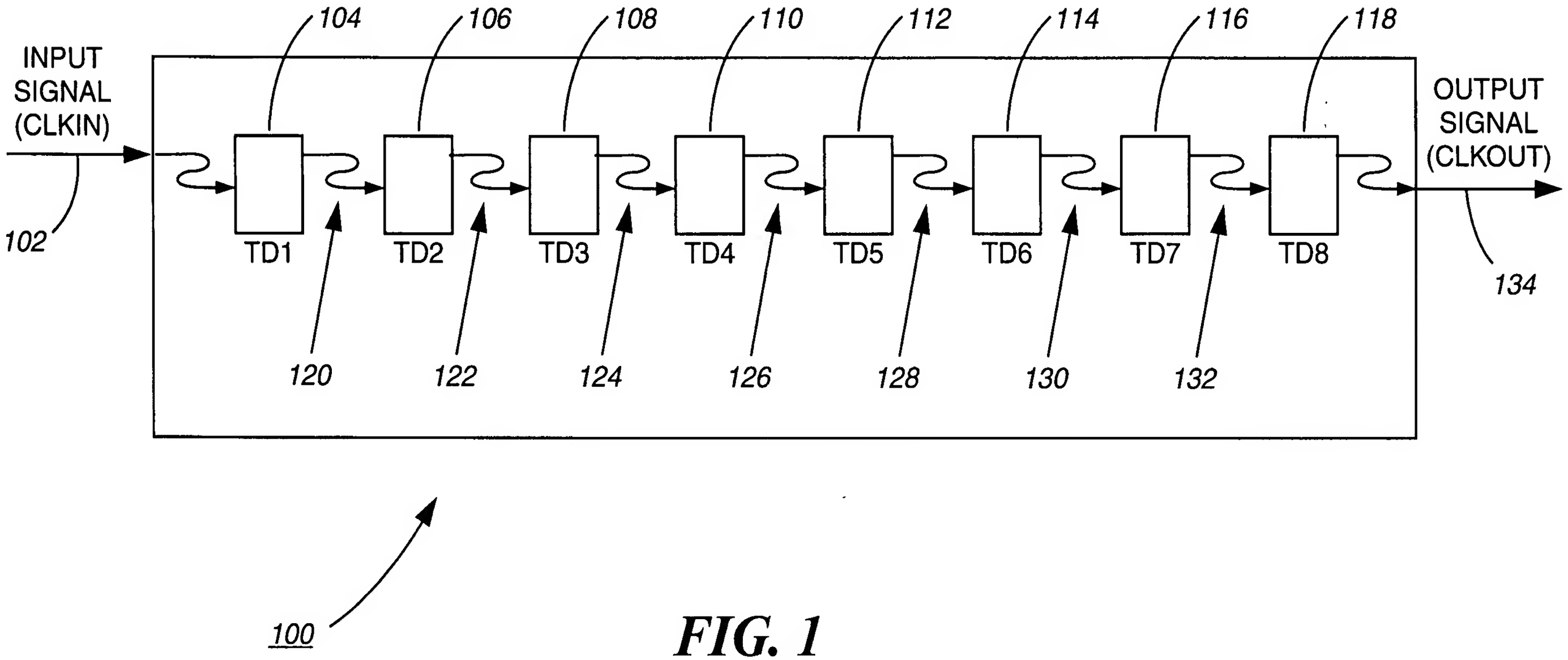
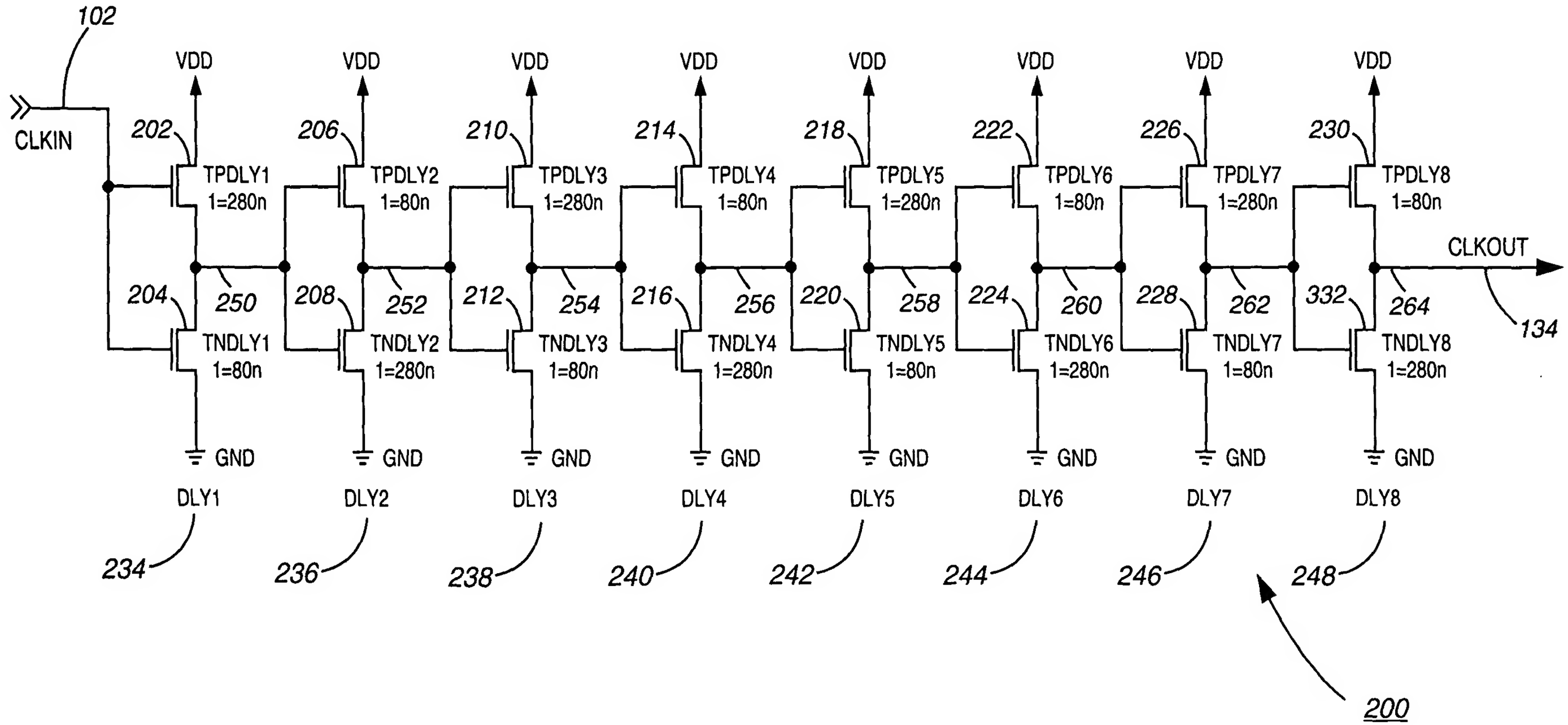
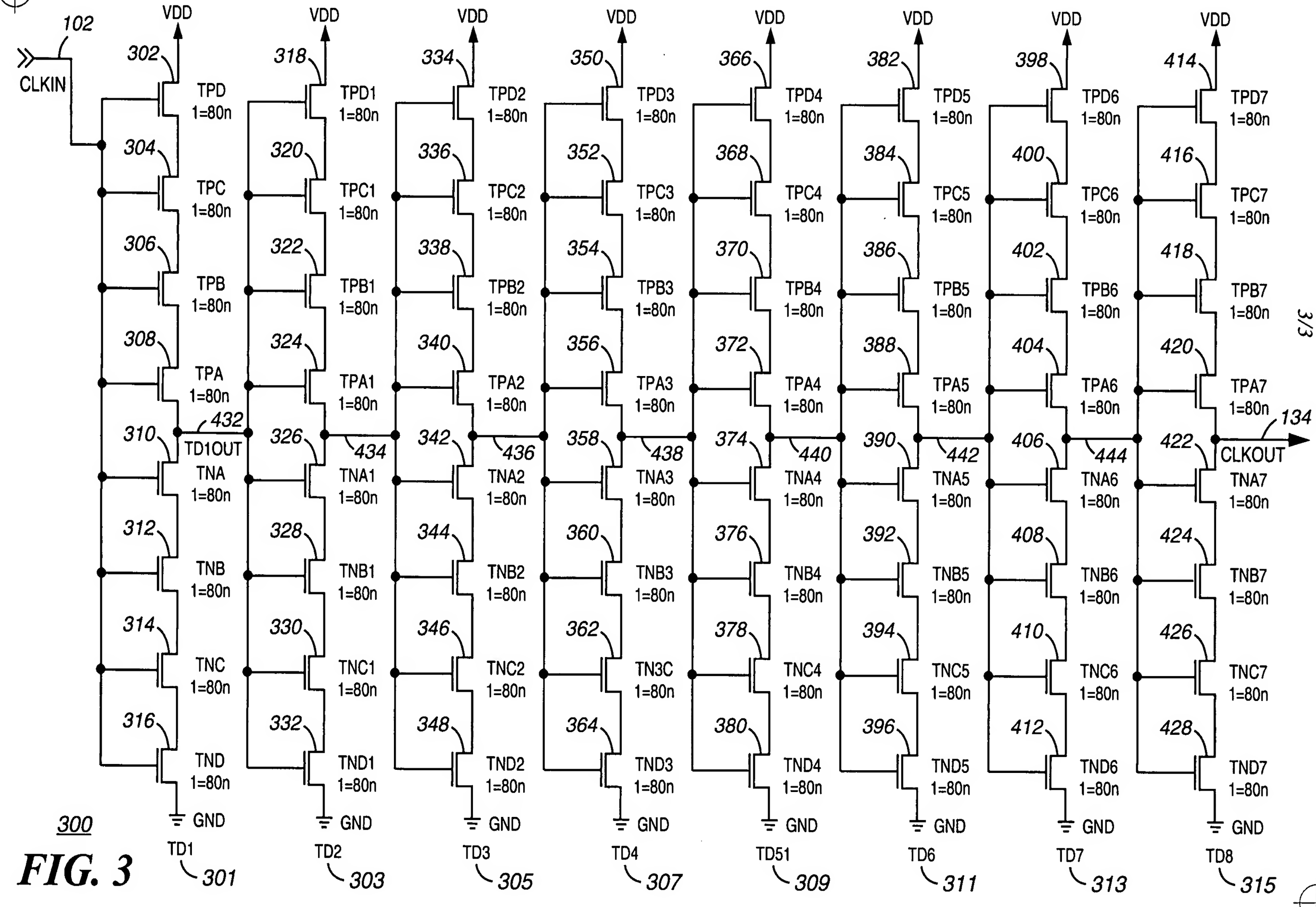

INPUT
SIGNAL
(CLKIN)
102
104
106
108
110
112
114
116
118
TD1
TD2
TD3
TD4
TD5
TD6
TD7
TD8
OUTPUT
SIGNAL
(CLKOUT)
134
120
122
124
126
128
130
132
100

FIG. 1



PRIOR ART

FIG. 2


102
CLKIN
VDD
302
TPD
1=80n
304
TPC
1=80n
306
TPB
1=80n
308
TPA
1=80n
310
TD1OUT
TNA
1=80n
312
TNB
1=80n
314
TNC
1=80n
316
TND
1=80n
GND
TD1
301
318
TPD1
320
TPC1
322
TPB1
324
TPA1
326
TNA1
328
TNB1
330
TNC1
332
TND1
TD2
303
334
TPD2
336
TPC2
338
TPB2
340
TPA2
342
TNA2
344
TNB2
346
TNC2
348
TND2
TD3
305
350
TPD3
352
TPC3
354
TPB3
356
TPA3
358
TNA3
360
TNB3
362
TN3C
364
TND3
TD4
307
366
TPD4
368
TPC4
370
TPB4
372
TPA4
374
TNA4
376
TNB4
378
TNC4
380
TND4
TD51
309
382
TPD5
384
TPC5
386
TPB5
388
TPA5
390
TNA5
392
TNB5
394
TNC5
396
TND5
TD6
311
398
TPD6
400
TPC6
402
TPB6
404
TPA6
406
TNA6
408
TNB6
410
TNC6
412
TND6
TD7
313
414
TPD7
416
TPC7
418
TPB7
420
TPA7
422
TNA7
424
TNB7
426
TNC7
428
TND7
TD8
315
432
434
436
438
440
442
444
134
CLKOUT

300

FIG. 3